

Special Issue

Biomedical Imaging and Electrophysiology of the Developing and Mature Cardiovascular System

Message from the Guest Editors

The field of cardiovascular development has rapidly expanded understanding of the molecular mechanisms guiding heart development thanks to technical leaps in biochemistry and molecular biology technology. The field is now replete with databases of genetic, epigenetic, proteomic and signaling changes that occur during normal and abnormal development of several species. The creation and implementation of new technologies will likely overcome the hurdles of interrogating this tiny, dynamic system and aid in the integration of the physiological parameters with the molecular mechanisms. There is no doubt that with a beating heart controlling the cardiovascular system, parameters such as flow, pressure, shear forces, action potential duration, voltage, impulse conduction velocity, and other mechanical and electrophysiological parameters, are all integrated with, respond to and impact the molecular changes that are occurring in the cardiovascular system and the embryo as a whole. Filling this gap in understanding is challenging and requires the field to learn several languages including those of the molecular biologists, physiologists, physicists, and biomedical engineers.

Guest Editors

Prof. Dr. Michiko Watanabe

Dr. Stephanie M. Ford

Prof. Dr. Andrew M. Rollins

Deadline for manuscript submissions

closed (20 January 2019)



Journal of Cardiovascular Development and Disease

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 3.7
Indexed in PubMed



mdpi.com/si/9820

*Journal of Cardiovascular
Development and Disease*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jcdd@mdpi.com

[mdpi.com/journal/
jcdd](https://mdpi.com/journal/jcdd)





Journal of Cardiovascular Development and Disease

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 3.7
Indexed in PubMed



[mdpi.com/journal/
jcdd](https://mdpi.com/journal/jcdd)



About the Journal

Message from the Editor-in-Chief

The primary goal of the *Journal of Cardiovascular Development and Disease* (JCDD, ISSN 2308-3425) is to provide cardiovascular scientists a platform to publish their work in a quick and efficient way. Topics can range from studies designed to decipher the events underlying early heart development to studies focusing on the origins of congenital and acquired heart disease. Papers submitted to JCDD undergo a fast, yet thorough, peer-review process. In this process, we will apply strict ethical policies and standards. JCDD guarantees fast dissemination of results to a large scientific audience

Editor-in-Chief

Prof. Dr. Thomas Brand
National Heart & Lung Institute, Imperial College London, South
Kensington Campus, London SW7 2AZ, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cardiac and Cardiovascular Systems) /
CiteScore - Q2 (General Pharmacology, Toxicology and
Pharmaceutics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 28.8 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).